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MAR 12 2007

Listing of Claims:

Claims 1-18. Cancelled

Please add the following new claims:

19. (New) A monolithic circuit chip comprising:

a sensor array;

a digitizer for digitizing the captured images; and

decoder for decoding the digitized images, wherein the digitizer performs a method for use in processing an analog electrical signal containing information representative of reflected light from indicia including regions of different light reflectivity, wherein the analog electrical signal contains edge transitions corresponding to boundaries between adjoining regions of different light reflectivity of the indicia, the method comprises:

analyzing the edge transitions of at least a part of the analog electrical signal to determine a level of blur in that part of the analog electrical signal; and

based on the determined level of blur, selecting one of a plurality of different techniques for processing that part of the analog electrical signal to produce a digitized electrical signal in which transitions in the digital level of the signal correspond to boundaries between adjoining regions of different light reflectivity of the indicia.

20. (New) The monolithic circuit chip of Claim 19, wherein the step of analyzing the edge transitions is performed on a plurality of different parts of the analog electrical signal and

different digitizing techniques are used on the different parts of the analog signal depending on the level of blur in the different parts of the analog signal.

21. (New) The monolithic circuit chip of Claim 19 further comprising:
ranking the edge transitions by magnitude; and
analyzing the ranked edge transitions to detect the extent of blur represented in the part of the analog electrical signal.

22. (New) The monolithic circuit chip of Claim 21, wherein the ranking is done by forming a histogram of the magnitudes of the edge transitions.

23. (New) The monolithic circuit chip of Claim 21, further comprising if the part of the analog electrical signal has edge transitions of substantially different magnitudes, determining that significant blur is represented in that part of the analog electrical signal.

24. (New) The monolithic circuit chip of Claim 23, further comprising rejecting edge transitions having less than a threshold magnitude.

25. (New) The monolithic circuit chip of Claim 23, further comprising:
grouping the edge transitions into sets by magnitude; and

testing whether the difference between a first magnitude associated with a first set and a second magnitude associated with a second set is substantially equal to the difference between the first magnitude and a third magnitude associated with a third set.

26. (New) The monolithic circuit chip of Claim 19, wherein the sensor array, digitizer and decoder are formed on the monolithic circuit chip using complementary metal oxide semiconductor (CMOS) techniques.

27. (New) The monolithic circuit chip of Claim 19, wherein the decoder comprises a processor and memory.

28. (New) The monolithic circuit chip of Claim 19, wherein the sensor array is a linear array of cells for capturing light reflected by a one dimensional bar code symbol.

29. (New) The monolithic circuit chip of Claim 19, wherein the sensor array is an area sensor array for capturing two dimensional images.

30. (New) A monolithic circuit chip comprising:
a sensor array;
a digitizer for digitizing the captured images; and
decoder for decoding the digitized images, wherein the digitizer performs a method for use in processing an analog electrical signal containing information representative of reflected

light from indicia including regions of different light reflectivity, wherein the analog electrical signal contains edge transitions corresponding to boundaries between adjoining regions of different light reflectivity of the indicia, the method comprises:

determining whether an edge transition corresponds to a boundary between adjoining regions of substantially equal width; and

based on the determination, producing a digitized electrical signal in which transitions in the digital level of the signal correspond to the boundaries between adjoining regions of different light reflectivity of the indicia.

31. (New) The monolithic circuit chip of Claim 30, further comprising determining whether at least a part of the analog electrical signal is inconsistent with an alternating dark-and-light feature of a bar code symbol.

32. (New) The monolithic circuit chip of Claim 31, further comprising if the inconsistency is found, rejecting at least that part of the analog electrical signal.

33. (New) The monolithic circuit chip of Claim 30, further comprising determining whether a part of the analog electrical signal crosses a magnitude threshold more than once.

34. (New) The monolithic circuit chip of Claim 33, further comprising if the part is found to cross the magnitude threshold more than once, rejecting at least the part of the analog electrical signal.

35. (New) The monolithic circuit chip of Claim 30, further comprising determining the extent to which an edge transition that corresponds to a boundary between two adjoining regions of different widths is affected by one of the regions.

36. (New) The monolithic circuit chip of Claim 30, wherein the sensor array, digitizer and decoder are formed on the monolithic circuit chip using complementary metal oxide semiconductor (CMOS) techniques.

37. (New) The monolithic circuit chip of Claim 30, wherein the sensor array is a linear array of cells for capturing light reflected by a one dimensional bar code symbol.

38. (New) The monolithic circuit chip of Claim 30, wherein the sensor array is an area sensor array for capturing two dimensional images.